# National Type Evaluation Program (NTEP) Committee Interim Report

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#### INTRODUCTION

The National Type Evaluation Program (NTEP) Committee (hereinafter referred to as "Committee") submits its Interim Report for consideration by the National Conference on Weights and Measures (NCWM). This report contains the items discussed and actions proposed by the Committee during its Interim Meeting in Jacksonville, Florida, January 22 - 25, 2006.

This Report contains many recommendations to revise or amend National Conference on Weights and Measures (NCWM) Publication 14, Administrative Procedures, Technical Policy, Checklists, and Test Procedures or other documents. Proposed revisions to the publication(s) are shown in **bold face print** by **striking out** information to be deleted, and **underlining** information to be added.

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<sup>\*</sup>NTETC Sector Meeting Summaries are included in the CD version of the NCWM Publication 16 and will not be included in hard copies of the publication. Hard copies are available upon request from the NIST technical advisor.

## Table C Glossary of Acronyms\*

BIML	Bureau of International Legal Metrology	IR	International Recommendation	
CD	Committee Draft <sup>1</sup>	MAA	Mutual Acceptance Arrangement	
CIML	International Committee of Legal	OIML	International Organization of Legal	
	Metrology		Metrology	
CPR	Committee on Participation Review	R	Recommendation	
DD	Draft Document <sup>2</sup>	SC	Subcommittee	
DR	Draft Recommendation <sup>2</sup>	TC	Technical Committee	
DV	Draft Vocabulary <sup>2</sup>	WD	Working Document <sup>3</sup>	
DoMC	Declarations of Mutual Confidence			

<sup>&</sup>lt;sup>1</sup>CD: a draft at the stage of development within a technical committee or subcommittee; in this document, successive drafts are numbered 1 CD, 2 CD, etc.

<sup>&</sup>lt;sup>2</sup>DD, DR, DV: draft documents approved at the level of the technical committee or subcommittee concerned and sent to BIML for approval by CIML.

<sup>&</sup>lt;sup>3</sup>WD: precedes the development of a CD; in this document, successive drafts are number 1 WD, 2 WD, etc.

<sup>\*</sup>Explanation of acronyms provided by OIML.

## Details of All Items (In Order by Reference Key Number)

## 1. Test Data Exchange Agreements

**Background/Discussion:** This item was included on the Committee's agenda in 1998 to provide an update on NTEP's work to establish bilateral and multilateral agreements. Under such agreements and arrangements, manufacturers would be able to submit their equipment to any of the participating countries for testing to OIML-recommended requirements. The resulting test data would be accepted by other participants as a basis for issuing each country's own type approval certificate. Following is a report on the three types of test data exchange agreements:

*Mutual Acceptance Arrangement (MAA):* NTEP Director, Stephen Patoray, attended an MAA Seminar for Assessors September 5 - 6, 2005. During this seminar, Mr. Patoray provided the attendees an overview of the additional requirements in the United States for both OIML R 76 and R 60. He updated the attendees at the 2006 NCWM Interim meeting regarding the current status of the MAA and other developments. The next scheduled meeting of the Committee on Participation Review (CPR) for R 76 and R 60 is now scheduled for March 7, 8, and 10, 2006, in Sydney, Australia.

The NTEP Committee discussed this item during the fall 2006 NTEP Committee meeting. Based on previous input from the NCWM membership and other discussion on this topic, the NTEP Committee believes the United States should be a Country A (issuing participant) with full laboratory capabilities for OIML R 76 "Non-automatic weighing instruments" and should not participate in a Declaration of Mutual Confidence (DoMC) as a Country B (utilizing participant) for R 76. However, the NTEP Committee recognizes that currently there are no identified resources available to be able to move forward with a laboratory for R 76 at this time. Based on this fact and given the realities of the NIST Force Group's position to not participate as a testing laboratory for OIML R 60 "Load cells", the NTEP Committee is recommending the NCWM Board of Directors consider signing the DoMC as a Country B for R 60 "Load cells" only.

The MAA is also in the NCWM Board of Directors Committee Report.

## **Summary:**

During the 2006 NCWM Interim Meeting, the full NCWM Board carefully considered this issue and the recommendation of the NTEP Committee. Significant discussion was held on this issue with the primary focus on the desire to become a utilizing member (Country B) for the DoMC that will cover OIML R 60 load cells. Significant comments also came from the full membership during the 2006 NCWM Interim Meeting Open Hearings on this issue. In addition, a very large group attended a late evening meeting on this topic. The participants in this meeting asked many important questions and demonstrated a high level of interest in the NCWM's direction regarding MAAs. The NTEP Committee would like to acknowledge and thank this group of participants for their significant contributions in discussing this issue.

The decision of the Board was to accept the recommendation of the NTEP Committee and indicate the intention of signing on as a utilizing member of the DoMC for OIML R 60 Load Cells. The NCWM Board indicated no interest at this time in being a utilizing participant for OIML R 76 "Non-automatic weighing instruments (NAWI)." The intent is to investigate various alternatives and determine if a laboratory can be established that will allow NCWM to be an issuing participant in the DoMC for OIML R 76. It was clearly stated that this laboratory would have to be "viable" and that NCWM must fully understand the effect such a signing may have on NTEP, existing NTEP Labs, and our standards development process in NCWM. It was also stated that it is not clear at this time if funding for such a laboratory is available.

Bilateral Agreements: No additional discussions have been held on this topic, pending the outcome of the MAA discussions.

NTEP-Canada Mutual Recognition Program: No additional areas of MRA activities have been identified.

## 2. Adoption of Uniform Regulation for National Type Evaluation by States (URNTE)

**Background/Discussion:** The Scale Manufacturers Association (SMA) has hosted NTEP adoption and implementation meetings for state directors at each regional weights and measures association conference. These meetings enable jurisdictions to share information about adopting and implementing NTEP in their respective jurisdictions, encourage non-NTEP jurisdictions to adopt the regulation, and allow current NTEP jurisdictions to share ideas on how to make enforcement more effective and uniform among the states. The meetings also provide NTEP management with information related to areas in which the operation and implementation of the program can be improved. Several questions have been posed at these meetings about issues associated with NTEP interpretation or practice. Comments from 1997 to 2004 have been summarized, without attribution, and are available for review and download on the SMA website at http://www.scalemanufacturers.org.

During the most recent NCWM annual meeting, SMA Representative, Darrell Flocken, indicated the SMA decided it would be more useful to show which states require NTEP Certificates before allowing weighing and measuring devices to be certified as legal for trade regardless of their adoption of the NIST/NTEP URNTE. SMA developed a new map that shows that status. The SMA, deciding that it would be more useful to show which states require Voluntary Registration of Service Agencies and Service Personnel (VRSA) regardless of their adoption of VRSA, developed separate maps that show that status. Such maps are available for review and download on the SMA web site at http://www.scalemanufacturers.org.

Mr. Flocken will update the attendees on any additional developments in this area. Based on comments from the NCWM membership, the NTEP Committee will make a final decision to discontinue this item from the NTEP report.

#### **Summary:**

The NTEP Committee wishes to thank and acknowledge the SMA for their continuing work on this topic. The updated maps will be available on the SMA website for all to review. Based on comments from the NCWM membership it was the decision of the NTEP Committee to discontinue reporting on this item as part of the NCWM Interim and Annual Meeting report agendas.

#### 3. NTEP Participating Laboratories and Evaluations Reports

At the 2006 NCWM Interim Meeting, Stephen Patoray, NTEP Director, updated the Committee on NTEP laboratory and administrative activities since October 1, 2003. A report of NTEP Laboratory Activities was distributed at the 2006 NCWM Interim Meeting.

The NTEP Weighing and Measuring Laboratories held a joint meeting in April 2005 in Columbus, Ohio. The NTEP Weighing Laboratories also met September 25, 2005, before the meeting of the Weighing Sector in Columbus, Ohio. The NTEP Measuring Laboratories also met October 21, 2005, prior to the Measuring Sector meeting in Nashville, Tennessee.

The next scheduled meeting of the NTEP Laboratories is scheduled for April 2 - 5, 2006, in Annapolis, Maryland.

#### **Summary**:

During the 2006 NCWM Interim Meeting, the NTEP Director, Steve Patoray, reported that the number of the authorized NTEP labs has not changed within the last year. He also indicated that the NTEP Committee and he are watching the backlog at the NTEP laboratories closely. At the present time, the backlog at the NTEP laboratories has returned to more historical levels, after a period of months at a much higher level. Comments from the floor indicated interest in continuing to improve the length of time to complete an NTEP evaluation. It was noted, based on some random internal audit information provided by the California NTEP laboratory, that a significant portion (up to 50 % of the total time) of the time spent during an evaluation may be due to delays by the manufacturer. There could be several factors, but preparedness by the applicant, timely response to laboratory inquiries, and correcting device deficiencies lead to significant delays in completing an evaluation. The NTEP Committee will continue to monitor the laboratory backlog and also attempt to find additional solutions to improve the time to compete a device evaluation.

## **NTEP Participating Laboratories and Evaluations Report**

NTEP Application Statistics 10/01/05 to 12/31/05						
	Previous Quarter	Curre Quar	Total To Date			
	10/1/2005 - 12/31/2005	10/1/20 12/31/2				
Applications Processed	57	48	(45) 1268			
Applications Completed	32	15	982			
New Certificates Issued	33	59	1196			
Certificates Distributed to State Directors	40	75	1188			
Certificates Posted to Web Site	51	51	3720			
Current Active NTEP Certificates (12/31/2005)	-	-	1529			
	Average		Median			
Time for NCWM to Assign an Evaluation	11		10			
Time for NCWM to Review a Draft Certificate	for NCWM to Review a Draft Certificate 8		7			
me for Complete Evaluation (Completed NCWM Assignments) 174			142			

### 4. NTETC Sectors Reports

The Committee heard an update on the activities of the National Type Evaluation Technical Committee (NTETC) Sectors at the 2006 NCWM Interim Meeting. Outlined below is a brief summary of Sector activities since the 2005 NCWM Annual Meeting.

*Grain Analyzer Sectors:* The NTETC Grain Analyzer Sector held a joint meeting in Kansas City, Missouri, August 24 - 25, 2005. A draft of the final summary was provided to the Committee prior to the 2006 NCWM Interim Meeting for review and approval.

The next meeting of the Grain Analyzer Sector is tentatively scheduled for August 2006 in Kansas City, Missouri. For questions on the current status of Sector work or to propose items for a future meeting, please contact the Sector technical advisors:

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Glenarm, IL 62536

Diane Lee NIST WMD 100 Bureau Drive – Stop 2600 Gaithersburg, MD 20899-2600 Phone: (301) 975-4405

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e-mail: diane.lee@nist.gov

*Measuring Sector:* The NTETC Measuring Sector met October 21 - 22, 2005, in Nashville, Tennessee. A draft of the final summary was provided to the NTEP Committee prior to the 2006 NCWM Interim Meeting for review and approval.

The next meeting of the Measuring Sector is scheduled for October 2005 in conjunction with the Southern Weights and Measures Association's Annual Meeting. For questions on the current status of sector work or to propose items for a future meeting, please contact the sector technical advisor:

Richard Suiter NIST WMD 100 Bureau Drive – Stop 2600 Gaithersburg, MD 20899-2600 Phone: (301) 975-4406

Fax: (301) 926-0647 e-mail: rsuiter@nist.gov

*Weighing Sector:* The NTETC Weighing Sector met September 25 - 27, 2005, in Columbus, Ohio. A final draft of the meeting summary was provided to the Committee prior to the 2006 NCWM Interim Meeting for review and approval.

The next Weighing Sector meeting is scheduled for September 2006 in Annapolis, Maryland. For questions on the current status of Sector work or to propose items for a future meeting, please contact the sector technical advisor:

Steven Cook NIST WMD 100 Bureau Drive – Stop 2600 Gaithersburg, MD 20899-2600 Phone: (301) 975-4003

Fax: (301) 926-0647 e-mail: stevenc@nist.gov

**NTETC Sector Summaries:** The NTEP Committee received copies of the summaries prior to the 2006 NCWM Interim Meeting for their review and approval. Past NTETC Sector summaries are available upon request from NCWM and the NIST technical advisor:

NCWM Inc. or NIST WMD Technical Advisor, Steven Cook Phone: (240) 632-9454 (See contact information above)

e-mail: ncwm@mgmtsol.com

#### **Summary:**

The NTEP Committee reviewed the recommendations of the Weighing, Measuring and Grain Analyzer Sectors. The recommended changes, based on the final summary reports of these sectors, were accepted by the NTEP Committee. The NTEP Committee instructed the NTEP director to amend NCWM Publication 14 accordingly and granted editorial privilege to the NTEP director.

In addition, the NTEP Committee heard that progress has been made by the work groups on the checklists for both Multiple Dimension Measuring Devices (MDMD) and Automatic Weighing Systems. The NTEP Committee accepted a recommendation from the NTEP director that these updated checklists, even though still in draft form, be placed in the current edition of NCWM Publication 14. The draft checklists will be used by the labs and reviewed by all applicants so that final comments can be received and these checklists may be finalized. It was noted that both the MDMD and the AWS work groups would need to meet again to finalize the changes to the appropriate checklists.

The NTEP Committee reviewed an *ad hoc* procedure for the evaluation of a device with an option for radio frequency communication. This brief checklist will be utilized to evaluate any devices that come into the NTEP labs with that option. This item will be reviewed by the NTEP labs at their upcoming April 2006 meeting and will also be reviewed by the NTETC Weighing and Measuring Sectors for further input.

# 5. NTEP Participation in U.S. National Work Group on Harmonization of NIST Handbook 44, NCWM Publication 14 and OIML R 76 and R 60.

The Secretariat for OIML TC 9/SC 1 recently submitted the second Committee Draft (2 CD) of OIML R 76-1 "Non-automatic Weighing Instruments" to the participating members of TC 9/SC 1 for review, comment, and vote. The 2 CD was developed based on an analysis of the 1992 edition OIML R 76, answers from OIML TC 9/SC 1 members to a questionnaire distributed in May 2002, and comments on the December 2003 Working Draft (WD) for R 76. The 2 CD

includes the changes to the December 2003 WD and the December 2004 1 CD based upon comments and recommendations of the U.S. National Work Group on R 76 (USNWG) and other countries.

The United States submitted twenty-seven recommendations and requests for clarifications to the secretariat of TC 9/S C1 on the 1 CD and opposed the 1 CD being elevated to a Draft Recommendation. Eighteen of the U.S. recommendations and requests for clarification were accepted by the secretariat, four recommendations resulted in alternate language proposed by the secretariat, and five recommendations were not accepted by the secretariat. The Secretariat provided the United States with a reason the remaining comments were not accepted

The secretariat has already registered the 2 CD of R 76-1 as a Draft Recommendation (DR) to not prolong the revision process at the technical committee level provided that the 2 CD receives approval.

#### **Summary:**

NIST WMD asked the USNWG for R 76 and other interested individuals, organizations, and associations to review the 2 CD and submit any comments, along with recommended language and technical justifications to NIST WMD. During the 2006 NCWM Interim Meeting, Steven Cook, NIST WMD, provided the committee with an update to the revision of R 76 and indicated that the United States will vote in favor of the 2 CD.

Although this current review of R 76 will likely be completed shortly, OIML has indicated a willingness to revisit the Recommendation and to consider including a large-capacity class similar to the current Handbook 44 Class III L and the Canadian Class III HD at some point in the future. WMD will be working with its Canadian counterparts to develop a North American Heavy-Duty Device Class.

#### 6. Software Sector

**Background:** During the 2005 Annual Meeting, general comments from the floor were supportive of developing this issue further. The NTEP Committee discussed the pros and cons of software evaluation. General concerns related to difficulties identifying software and determining traceability to an NTEP Certificate of Conformance during field verification and providing NTEP laboratories with a meaningful and functional checklist for evaluating software security and functions. NCWM staff presented the costs involved with forming a sector and the costs to conduct a sector meeting. This information, along with a detailed action plan for the development of the sector charges, was presented and reviewed by the NCWM Board of Directors. Based on this information, a decision was made at the 2005 Annual Meeting to form a Software Sector. Funding was provided for this Sector in the 2006 Budget.

The first scheduled meeting of the Software Sector is set for April 5, 6, and 7, 2006, in Annapolis, Maryland.

#### **Summary:**

During the 2006 NCWM Interim Meeting, the NTEP Committee Chair, Jim Truex, reported that the NTETC Software Sector was in the process of being formed. Interested parties have responded to a request to participate in this sector and members will be appointed by the NTEP Committee Chair.

Excerpts from the "Request for Participation" in this sector:

Without a doubt software is a major component of the weighing and measuring systems which are inspected today. NTEP evaluators need help. Weights and Measures (W&M) field officials need help. Even manufacturers and designers are asking for help. The W&M community is asking for guidance on how to evaluate software, how to inspect software in the field, what to look for, what to inspect, what level of security is needed and what information should be marked and available on-site. We are looking for volunteers, the experts, the software writers to assist us in this endeavor. As you may know, the NCWM Board of Directors has decided to create an NTETC Software Sector.

At this time the recommended scope of the Software Sector is to:

- Develop a clear understanding of the use of software in today's weighing and measuring instruments.
- Develop NIST Handbook 44 specifications and requirements, as needed, for software incorporated into
  weighing and measuring devices. This may include tools for field verification, security requirements,
  identification, etc.
- Develop NCWM Publication 14 checklist criteria, as needed, for the evaluation of software incorporated into weighing and measuring devices, including marking, security, metrologically significant functions, etc.
- Assist in the development of training guidelines for W&M officials in verifying software as compliant to
  applicable requirements and traceable to an NTEP Certificate. Educational material for manufacturers,
  designers, service technicians and end users may also be considered.

Funding for Sector Participants:

It is the current NCWM policy to provide funding to a sector meeting to one participant from each state NTEP Laboratory that is active in evaluating the device type(s) which will be discussed at the particular sector meeting. For the Software Sector, initially NCWM will provide funding to one (1) participant from New York (weighing), one (1) participant from Ohio (weighing), two (2) participants from California (one weighing, one measuring), and two (2) participants from Maryland (one weighing and one measuring).

## 7. Conformity Assessment Program (CAP)

At the fall 2006 NTEP Committee Meeting, the committee discussed the current status of this project. The following items were noted:

**Certificate Review:** The question is how this would be accomplished given the limited resources of NCWM? It was suggested that this item may need to be put on a "back burner" until resources can be clearly identified to proceed with the project in an efficient, thorough and accurate manner.

**Initial Verification:** This part of the project is moving forward. The work group chair, Lou Straub, has sent out requests to several states to act in the pilot program for this area. Several of the states have responded positively. The work group is currently waiting for data. There are still questions on what will be done with this data and how it will be tabulated.

**Verified Conformity Assessment Program (VCAP):** It is the opinion of the NTEP Committee that additional information may be needed from the work group in order to move this area of the program forward. A request will be made to the work group chair for a report on the current status of this committee.

#### **Summary:**

During the 2006 NCWM Interim Meeting:

The Chair of the Certificate Review Work Group, Don Onwiler, reported that the work in this area will not commence until there is adequate information available from the pilot being conducted by the Initial Verification Group. Once this information is available, the work to define the certificate requirements for Price Computing Scales can begin.

The Chair of the Initial Verification Work Group, Lou Straub, reported that requests for assistance have gone out and have been accepted by several state and local jurisdictions. Currently, he has received some feedback on the draft checklist. At this time, no actual completed forms have been returned. Several states made a commitment to put a priority on getting completed checklists submitted.

The NTEP Committee Chair, Jim Truex, reported that he has had contact from the Chair of the Verified Conformity Assessment Program (VCAP), Mark Knowles, stating that the work group has completed its initial work and will

provide the NTEP Committee with a final report prior to the April timeframe. Based on this report, the NTEP Committee will notify members of its content, request comment, and determine the next steps that need to be taken.

## 8. NTEP Certification of Residential-Type Water Meters

#### **New Item:**

#### **Summary:**

A request has come in from one state for NTEP to conduct evaluations and certify residential-type water meters. After discussions on this topic, the NTEP Committee made the decision to look into this item and determine the feasibility for NTEP to certify such devices. It was noted that currently there is a section in NIST Handbook 44 for these types of devices. It was also noted that California already conducts evaluation and certification under a state type evaluation program on these types of devices based on the current specifications, tolerances and other technical requirements in NIST Handbook 44. It was the belief of the Committee that work to complete a checklist and set up testing on such devices would not be a major effort. It was noted that the OIML R 49 is currently undergoing review, and also that there are significant differences between the requirements in NIST Handbook 44 and the OIML recommendation on this type of device. The NTEP director will report to the NTEP Committee on findings into setting up this Certification.

James Truex, Ohio, NTEP Committee Chair Don Onwiler, Nebraska, NCWM Chair Mike Cleary, California, NCWM Chair-Elect Stephen Pahl, Texas Charles Carroll, Massachusetts

NTEP Technical Advisor: S. Patoray, NTEP Director NTEP Technical Advisor: S. Cook, NIST WMD

#### **NTEP Committee**